AMENDMENTS TO THE CLAIMS

1-19. (Canceled)

20. (Currently amended) Annealing apparatus for annealing metallic billets, comprising at least two contact elements made of electrically conducting material which are electrically connected to a voltage source and which receive a billet of a light metal or a light metal ~~allow~~ alloy in the form of at least one metallic wire, in such a manner that said billet moves relative to said contact element and an electric current flows through said billet between said elements, ~~and~~ the material of at least one contact element is a metal alloy which is adapted to the material of said billet such that substantially no material from said billet diffuses into said contact element, and at least one cold-processing means through which said billet is drawn, said cold-processing means comprising at least one drawing die, wherein the last drawing in said cold-processing means in the material flow direction is a terminal die.

21. (Previously presented) Apparatus according to claim 20, wherein said billet material is one of aluminum and an aluminum alloy and said contact element material is one of aluminum and an aluminum alloy.

22. (Previously presented) Apparatus according to claim 20, wherein said billet material is a light metal, and said contact element material is made from the same light metal or from an alloy of the same light metal.

23. (Canceled)

24. (Previously presented) Apparatus according to claim 20, wherein said billet can be moved through said annealing apparatus along a predefined transport track.

25. (Previously presented) Apparatus according to claim 20, wherein said contact elements between which said billet is contacted for electrical current flow through said billet are produced of substantially the same material.

26. (Previously presented) Apparatus according to claim 20, further comprising a plurality of annealing paths, wherein one annealing path includes at least two contact elements for receiving a billet such that during the movement of said billet, an electrical current can flow through said billet between said contact elements and wherein one contact element is encompassed in one or more annealing paths.

27. (Previously presented) Apparatus according to claim 20, further comprising at least one guiding means which does not function as contact element under certain circumstances, so that the billet is transported along predetermined sections of a transport track through said annealing apparatus without said billet being subjected to an electrical current flow in said sections.

28. (Previously presented) Apparatus according to claim 27, wherein said guiding means comprise one of deflection rollers and comb rollers.

29. (Canceled)

30. (Previously presented) Apparatus according to claim 20, wherein at least one predetermined section of a transport track for moving said billet through said apparatus is a cooling section in which said billet can be cooled.

31. (Previously presented) Apparatus according to claim 30, wherein said billet is moved through a cooling medium within said cooling section.

32. (Previously presented) Apparatus according to claim 31, wherein said cooling medium is an oil.

33. (Previously presented) Apparatus according to claim 30, further comprising a stripping means disposed after said cooling section and adapted to remove coolant from the surface of said billet, the stripping means including a drawing die, wherein said stripping means is arranged such that it can be cooled or lubricated by said coolant.

34. (Previously presented) Apparatus according to claim 20, wherein said billet is moved through a protective gas in at least one predetermined section of a transport track for moving the billet through the apparatus.

35. (Previously presented) Apparatus according to claim 20, further comprising a cold-processing means, cooling section and a transport track for moving said billet through the apparatus, wherein a section of said transport track arranged between said cold-processing means and said cooling section is provided with protective gas and wherein an annealing path is arranged on said transport track between said cold-processing means and said cooling section.

36. (Previously presented) Apparatus according to claim 20, further comprising at least one drawing means for applying a force to said billet to cause said billet to move along a transport track through the apparatus.

37. (Previously presented) Apparatus according to claim 36, wherein said drawing means is a draw disc.

38. (Previously presented) Apparatus according to claim 20, wherein said at least two contact elements are provided with separate drive means.

39. (Previously presented) Apparatus according to claim 38, further comprising a control and regulating means which controls said drive means of said contact elements so as to prevent any slippage of the billet due to the changing length of said billet.

40. (Currently amended) Annealing apparatus for aluminum-containing billets, comprising at least two contact elements made of electrically conducting material which are electrically connected to a voltage source and which receive a billet in such a manner that said billet moves relative to said contact element and an electric current flows through said billet between said contact elements, ~~and~~ the material of at least one contact element is one of aluminum and an aluminum alloy into which substantially no material from said billet diffuses, and further comprises at least one cold-processing means through which said billet is drawn, said cold-processing means comprising at least one drawing die, wherein the last drawing die in said cold-processing means in the material flow direction is a terminal die.

41. (Previously presented) Apparatus according to claim 40, wherein said billet can be moved through said annealing apparatus along a predefined transport track.

42. (Previously presented) Apparatus according to claim 40, further comprising a plurality of annealing paths, wherein one annealing path includes at least two contact elements for receiving a billet such that during the movement of said billet, an electrical current can flow through said billet between said contact elements and wherein one contact element is encompassed in one or more annealing paths.

43. (Canceled)

44. (Previously presented) Apparatus according to claim 40, wherein at least one predetermined section of a transport track for moving said billet bracket through said apparatus is a cooling section in which said billet can be cooled.

45. (Currently amended) Method of manufacturing a metallic, low-stress billet comprising the steps of:

transporting a billet, in the form of at least one metallic wire, along a transport track, such that said billet comes into contact with at least two contact elements, which are connected to a voltage source, in at least one predetermined section of said transport track;

cold-forming of said at least one metallic wire by means of a cold-processing device having at least one drawing die;

allowing an electrical current to flow through a segment of said billet between said contact elements during the transport of said billet; and

selecting the material of said contact elements to match to the material of said billet, such that substantially no embrittlement or diffusion arises between the contact element material and the billet material during transport of said billet, or during the flowing of the current through said billet;

wherein the flow of said electrical current through said billet causes said billet to be annealed at low stress.

46. (Previously presented) Method according to claim 45, wherein the contact elements are selected to contain aluminum, so as to transport an aluminum-containing billet and to anneal said billet at low stress.

47. (Previously presented) Method according to claim 45, further comprising the step of cooling said billet following annealing by means of an oil.

48. (Previously presented) Method according to claim 47, further comprising the step of stripping off said oil from said billet employing a drawing die.

49. (Previously presented) Apparatus according to claim 32, wherein said oil is a thin oil.

50. (Previously presented) Method according to claim 46, wherein the contact elements are selected to contain an aluminum alloy.

51. (Previously presented) Method according to claim 47, wherein the oil is a thin oil.